

No. 721,198.

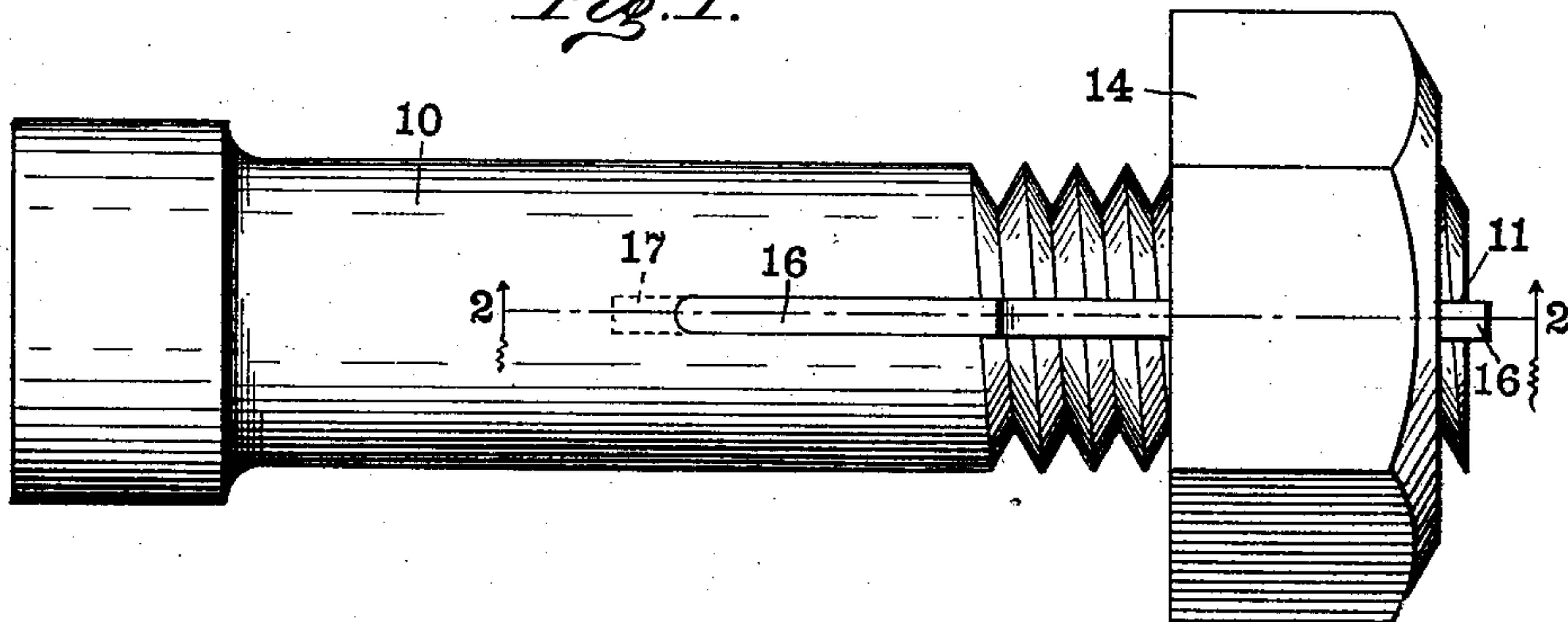
PATENTED FEB. 24, 1903.

W. KELLAM.  
NUT LOCK.

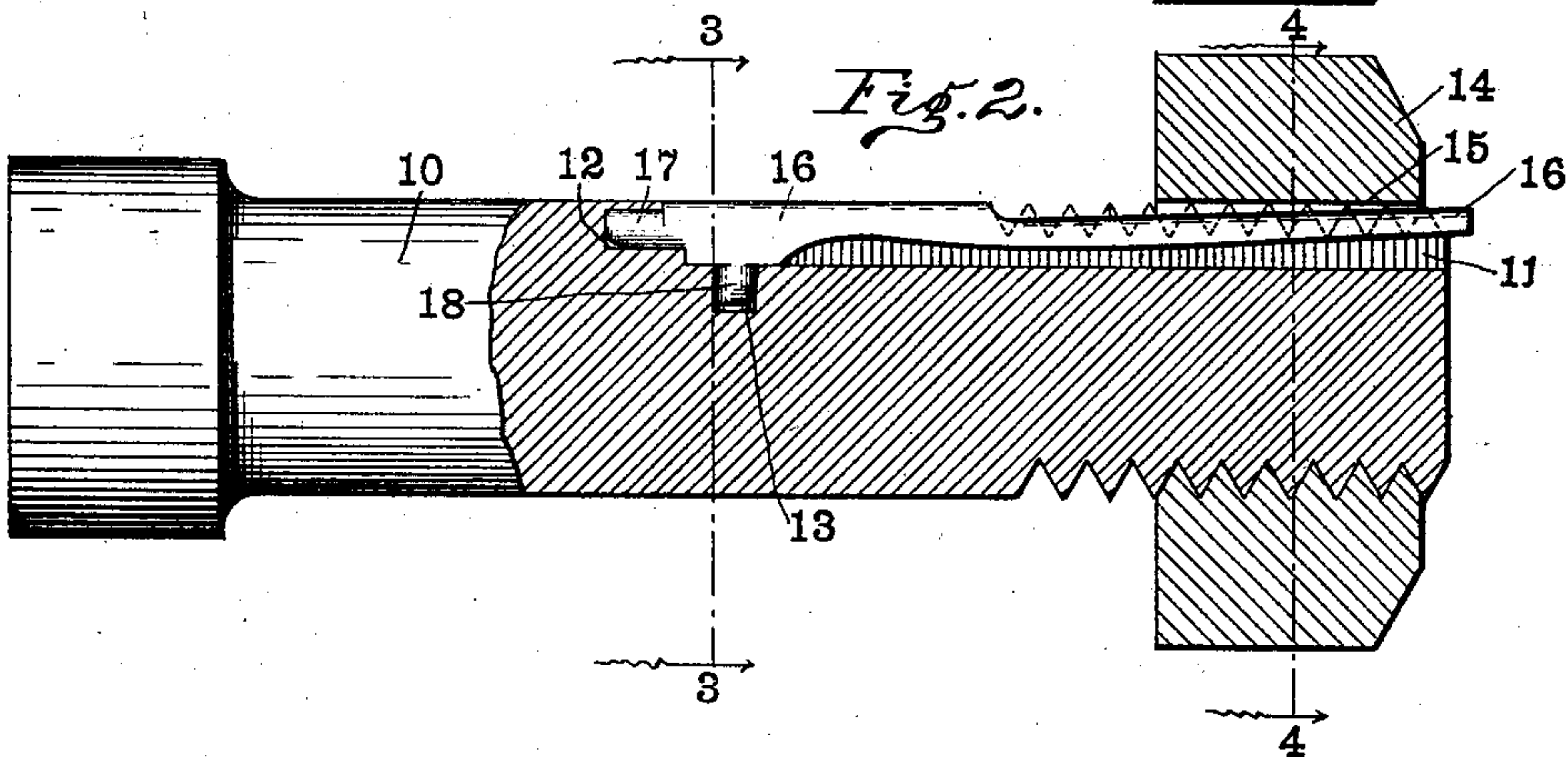
APPLICATION FILED SEPT. 22, 1902.

NO MODEL.

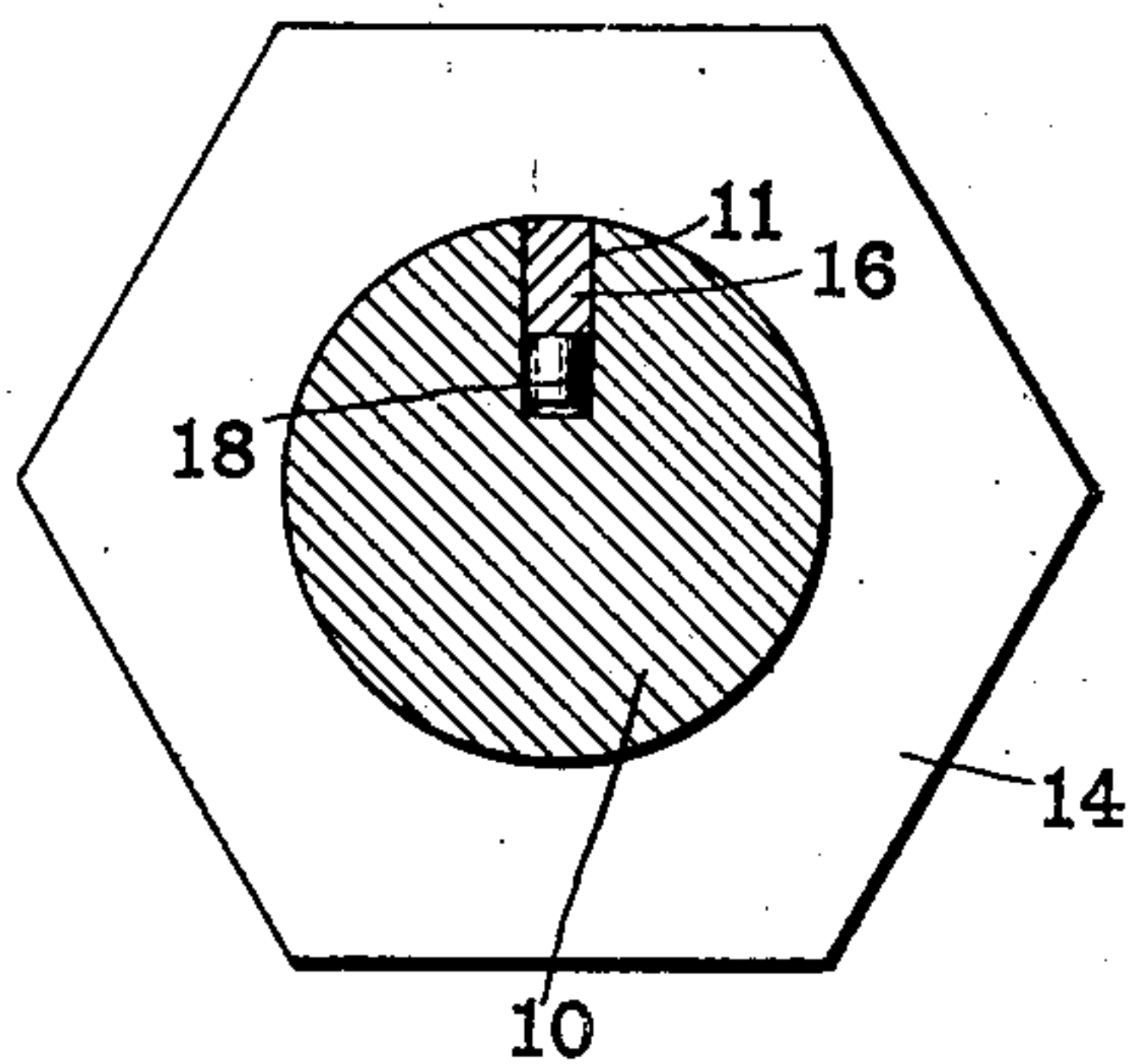
*Fig. 1.*



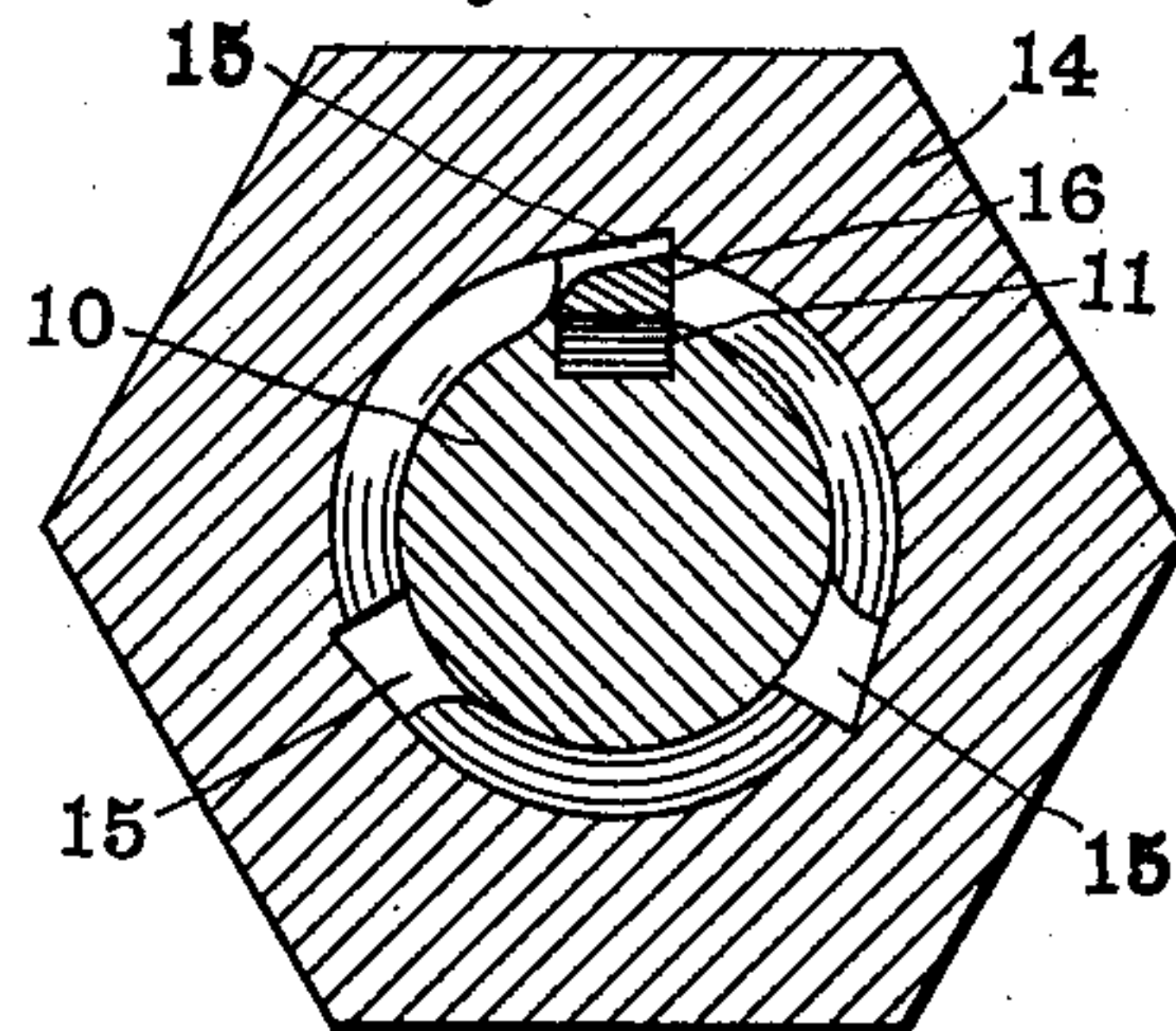
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILBER KELLAM, OF WASHINGTON TOWNSHIP, INDIANA.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 721,198, dated February 24, 1903.

Application filed September 22, 1902. Serial No. 124,262. (No model.)

*To all whom it may concern:*

Be it known that I, WILBER KELLAM, a citizen of the United States, residing in Washington township, in the county of Rush and State of Indiana, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

The object of my said invention is to produce an efficient and easily-operated nut-lock which shall be embodied in the bolt-and-nut structure and not be dependent upon any external devices for its operation. A bolt, nut, and lock-bar embodying my said invention will be first fully described and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof and on which similar reference characters indicate similar parts, Figure 1 is a plan of a bolt and a nut provided with a nut-lock embodying my said invention; Fig. 2, a view, partly in elevation and partly in section, as seen when looking in the direction indicated by the arrows from the dotted line 2 2 in Fig. 1, showing the construction and arrangement of the lock-bar more completely; and Figs. 3 and 4 are transverse sectional views on the dotted lines 3 3 and 4 4 in Fig. 2, respectively.

The bolt 10 is or may be, generally speaking, any ordinary bolt. In one side and extending through the threaded portion thereof is a channel 11. A perforation 12 forms a continuation of said channel at its inner end, and a second perforation 13 extends downwardly into the body of the bolt from the bottom of the channel and at right angles therewith, as shown. The nut 14 is, generally speaking, of an ordinary and well-known form. It, however, is provided with channels 15, extending through its threaded portion, parallel with the channel in the bolt 10. These channels 15 may be any number desired. I have shown three, which is a convenient number; but there may be more or less of them, as is desired and according to the fineness of adjustment wished, it being obvious that with a greater number of channels the adjustment of the nut may be more finely regulated.

I place within the channel 11 a lock-bar 16, said lock-bar having the characteristics of a

spring and adapted to engage with the channels in the nut as the same is forced into place. The channels 15 in the nut are rounded or inclined at one side, and the lock-bar 16 is rounded or inclined on the corresponding side, which comes in contact therewith as the nut is turned. The consequence is, as will be readily understood, that the nut can be turned on freely, as the inclined sides of the channels therein will pass over the corresponding side of the lock-bar, the result being simply to spring the locking-bar in as the threads in the nut pass it. The other sides of the channels in the nut, however, are formed square or straight, and the side of the locking-bar which comes in contact therewith is also formed square or straight, so that the nut cannot be turned back except after forcing in the locking-bar. When, therefore, the nut has been turned up, it cannot be removed until the locking-bar is forced inwardly out of engagement therewith, which, as well as the free passage of the nut, is permitted by the fact that the channel 11 in the bolt is deep enough to permit this necessary inward movement. This space, however, can be filled by a wedge after the nut has been forced up into place, if desired, and a permanent locking thus secured. The locking-bar has two projections 17 and 18, which enter the perforations 12 and 13, respectively, and hold said locking-bar firmly and strongly to its position when in use, as will be readily understood upon an examination of Fig. 2 of the drawings, while it is easily capable of being removed, replaced, and renewed when the nut is removed.

As will be seen, my improved nut-lock is entirely embodied within the bolt-and-nut structure, and all extra parts or pieces dependent upon any other device or part are wholly eliminated from the construction. In case of the accidental breaking or otherwise spoiling a locking-bar it can be renewed without affecting any other part.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a bolt having a channel extending through its threaded portion and two perforations one of which is a continuation of said channel and the other of

which extends sidewise therefrom into the body of the bolt, a locking-bar having projections adapted to enter and be secured in said perforations, and a nut having one or more  
5 channels extending through its threaded portion adapted to be placed over the threaded portion of the bolt and the adjacent portion of the locking-bar and be thus securely locked in place, substantially as shown and described.

10 2. The combination of a bolt having a channel extending through its threaded portion and two perforations one of which is a continuation of said channel and the other of which extends sidewise therefrom into the  
15 body of the bolt, a locking-bar having projections adapted to enter and be secured in said perforations, and a nut having one or more channels extending through its threaded portion adapted to be placed over the threaded portion of the bolt and the adjacent portion 20 of the locking-bar and be thus securely locked in place, said nut-channels and said locking-bar being beveled on their sides which come in contact as the nut is turned and substantially straight on their other sides, substantially as shown and described. 25

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 19th day of September, A. D. 1902.

WILBER KELLAM. [L. S.]

Witnesses:

CHESTER BRADFORD,  
JAMES A. WALSH.